

Applicant: Peter M. Bonutti
Application No.: 10/614,352
Examiner: D. Yabut

Amendments to the Claims

1. (Currently amended) An implant for securing a suture relative to a body tissue in a patient's body, comprising
 - a body portion defining a longitudinal central axis and including a first end and a second end, the second end including a pointed end portion; and
 - a plurality of passages each extending through the body portion orthogonal to the longitudinal central axis which allow for the threading of suture,
 - wherein a first passage is formed proximate said second end and a second passage is formed in the body portion further from said second end than said first passage; and
 - wherein a suture threaded through said first and second passages is operative to rotate said anchor when said suture is tensioned.
2. (Previously presented) The implant according to claim 1, wherein the body portion is substantially cylindrical.
3. (Previously presented) The implant according to claim 1, wherein the pointed end portion is conical in shape.
- 4.-7 (Canceled)
8. (Previously presented) The implant according to claim 1, wherein the plurality of passages are substantially parallel.

9. (Currently amended) An implant for securing a suture relative to a body tissue in a patient's body, comprising

a cylindrical body defining a longitudinal central axis and a pointed end portion having a central axis which is coincident with the longitudinal central axis of the cylindrical body,

a first passage extending through the cylindrical body proximate the pointed end portion in a direction transverse to the longitudinal central axis of the cylindrical body, and

a second passage extending through the cylindrical body in a direction transverse to the longitudinal central axis of the cylindrical body, said second passage located proximate mid-length the cylindrical body;

wherein said pointed end portion is operative to pierce body tissue; and

wherein first and second suture sections are passed through and extend away from said first and second passages, respectfully, and

wherein said [[anchor]] implant is rotated when the first suture section is tensioned and the second suture section is relaxed.

10. (Previously presented) The implant according to claim 9, wherein the first passage and the second passage are substantially parallel.

11. (Previously presented) The implant according to claim 9, wherein the pointed end portion forms an opening in the body tissue in the patient's body when a force is applied against a trailing end of the cylindrical body in a direction extending along the longitudinal central axis of the cylindrical body.

12. (Previously presented) The implant according to claim 9, wherein the cylindrical body is made of bone.

13. (Previously presented) The implant according to claim 12, wherein the bone is allogenic bone.

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14. (Previously presented) The implant according to claim 12, wherein the bone is autogenic bone.

15. (Previously presented) The implant according to claim 12, wherein the bone is xenogenic bone.

16. (Previously presented) The implant according to claim 12, wherein the bone is cortical bone.

17. (Previously presented) The implant according to claim 9, wherein the cylindrical body is formed of a single piece of freeze dried bone.

18. (Previously presented) The implant according to claim 9, wherein the cylindrical body is made of a material selected from the group consisting of a metal, a metal alloy, biodegradable material, and bioerodible material.

19. (Previously presented) The implant according to claim 9, wherein the body tissue is soft tissue.

20. (Previously presented) The implant according to claim 9, wherein the body tissue is bone.

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21. (Currently amended) An implant for securing a suture relative to a body tissue in a patient's body, comprising

a cylindrical body defining a longitudinal central axis and including a substantially conical end portion having a central axis which is coincident with the longitudinal central axis of the cylindrical body, wherein the cylindrical body is made of bone;

a first passage, proximate said conical end portion, extending through the cylindrical body in a direction transverse to the longitudinal central axis of the cylindrical body; and

a second passage extending through the cylindrical body substantially parallel to the first passage, disposed further from said conical end portion than said first passage, wherein the conical end portion forms an opening in the body tissue in the patient's body when a force is applied against a trailing end of the cylindrical body in a direction extending along the longitudinal central axis of the cylindrical body; and

wherein said first passage is formed to extend partially through the cylindrical body and partially through the pointed end portion such that a suture section threaded through said first passage is operative to initiate rotation of said [[anchor]] implant when said suture section is tensioned.

22-23. (Cancelled)

24. (Currently amended) An implant assembly for securing a suture relative to a body tissue in a patient's body, comprising:

a cylindrical body defining a longitudinal central axis and a pointed end portion having a central axis which is coincident with the longitudinal central axis of the cylindrical body;

a first passage formed proximate said pointed end extending through the cylindrical body in a direction transverse to the longitudinal central axis of the cylindrical body;

a second passage extending through the cylindrical body in a direction transverse to the longitudinal central axis of the cylindrical body;

a suture connected to the [[device]] cylindrical body under tension and extending through the first and second passages; and

a retainer having a first configuration in which the retainer is freely slideable along the suture and a second configuration in which the retainer is secured and connected to the suture for maintaining the tension in the suture.

25. (Previously presented) The assembly according to claim 24, wherein the retainer is made of a material that becomes flowable when ultrasonic vibratory energy is applied.

26. (Previously presented) The implant of claim 21, wherein the conical end portion forms an opening in bone in the patient's body.

27. (Previously presented) The implant of claim 1, wherein said first passage is formed to extend partially through the cylindrical body and partially through the pointed end portion.

28. (New) The implant of claim 24, wherein a force distribution member is disposed between the retainer and the body tissue.